AUSA – NETWORK PANEL

6•DEC•07

Transforming the Force to an Expeditionary Army

LTG Jeff Sorenson
Chief Information Officer/G-6

U.S. ARMY

AMERICA'S ARMY: THE STRENGTH OF THE NATION
ARMY STRONG

Agenda

- **Persistent Conflict & Current Operating Environment**

- **Future Commercial Capabilities**

- **Future Directions: Network Service Center-Regional**

- **Conclusions**

Persistent Conflict

"*persistent conflict* … a period of protracted confrontation among state, non-state, and individual actors who will increasingly use violence as a means of achieving their political and ideological objectives…

This protracted confrontation will be *fueled by six important trends*…

…positive and negative impact of globalization

…competition for energy

…demographic trends increase instability

…climate changes and natural disasters

…proliferation of weapons of mass destruction

…failed or failing states providing safe havens"

General George Casey, CSA
National Press Club, 14 Aug 07

Complex Operating Environments

EXTENDED BORDERS

PHYSICAL

MEDIA

"FENCE SITTERS"

INFORMATION

EXTENDED DISTANCES
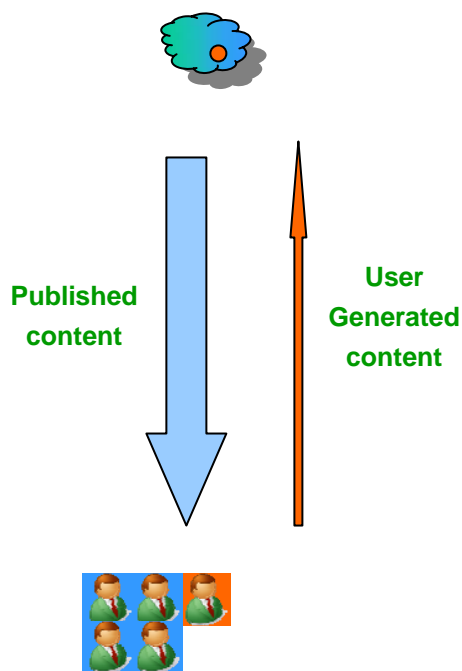
HUMAN

NETWORKS

IDEOLOGICAL CULTURAL

"The prize in the counterinsurgency fight is…the people." – **COL Sean MacFarland, CDR, 1-1 AD, 1 May 2007**
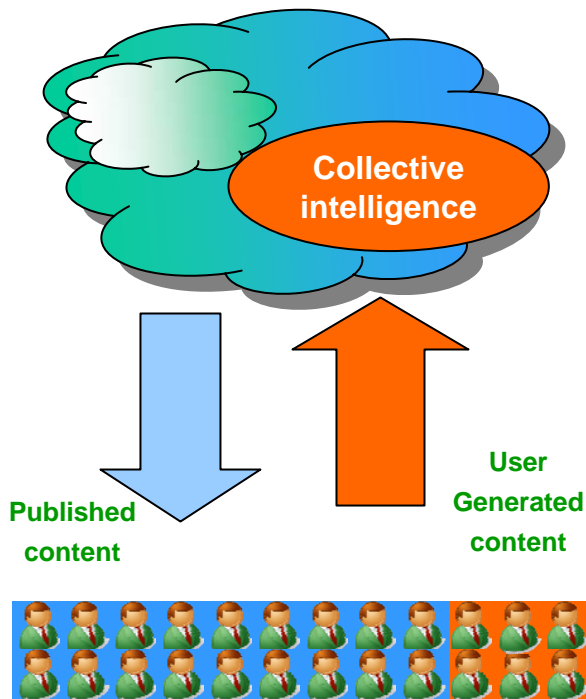
Web 1.0

"the mostly read-only web"

250,000 sites

Published content

User Generated content

45 million global users

1996

Web 2.0

"the wildly read-write web"

80,000,000 sites

Collective intelligence

Published content

User Generated content

1 billion + global users

2006

Web 3.0

"nearly universal web"

8 billion sites

Intelligent Awareness

Published content

Computer-Generated content

User Generated content
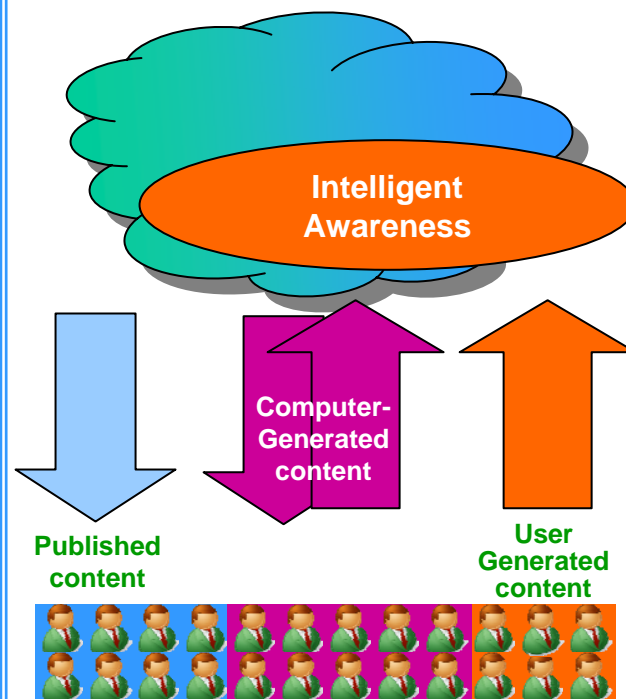
4 billion + human global users

4 billion + semi-autonomous computers

2020

The Problem

"Where is my stuff?"
356,000,000 Google hits

"Where is my Tank?"
67,800,000 Google hits

"Where is my M1A1 Tank?"
106,000 Google hits

"Where is SGT Smith's M1A1 Tank?"
11,300 Google hits

"Where is SGT Smith's M1A1 Tank in Iraq?"
998 Google hits

NOTE: Search preformed – 15 Nov 07

"Where is my Stuff?"

Time: 29DEC0912.25

YOU ARE: 241782222.2.11ACR.FTrp

Your Location: 38.45.18N:78.23.19W

Your Tank's Location: 39.25.26N:77.43.10W
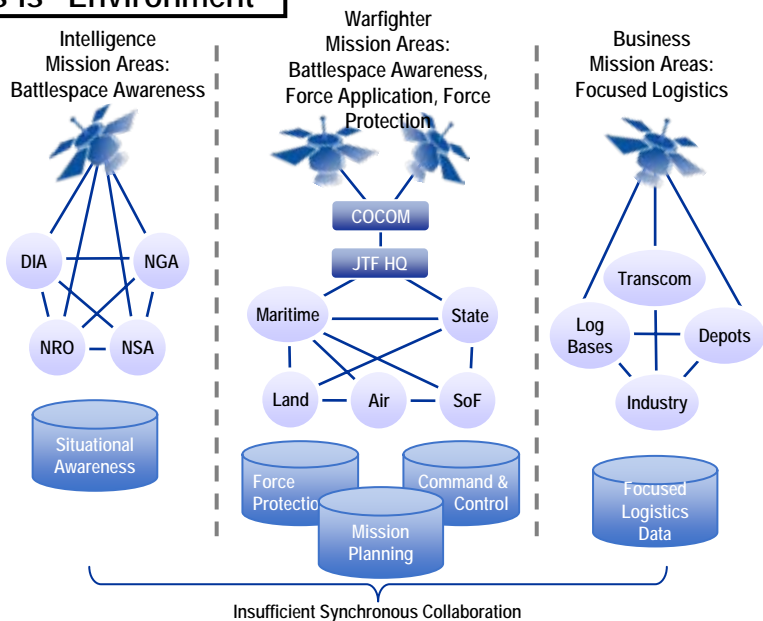
Traveling: WSW35MPH

ETA: 1.25HRS YOUR PRESENT
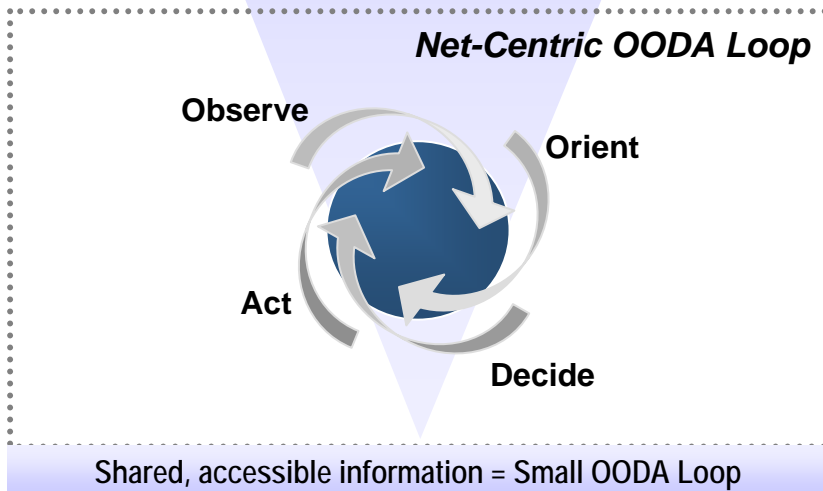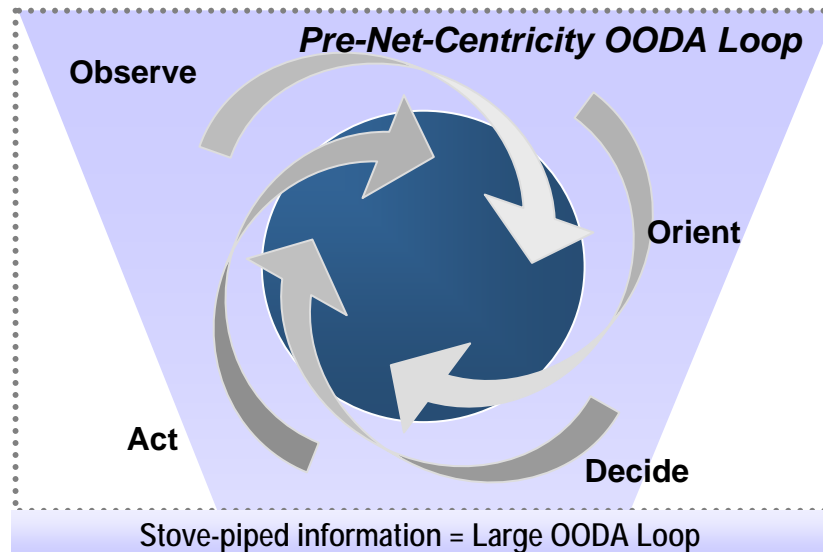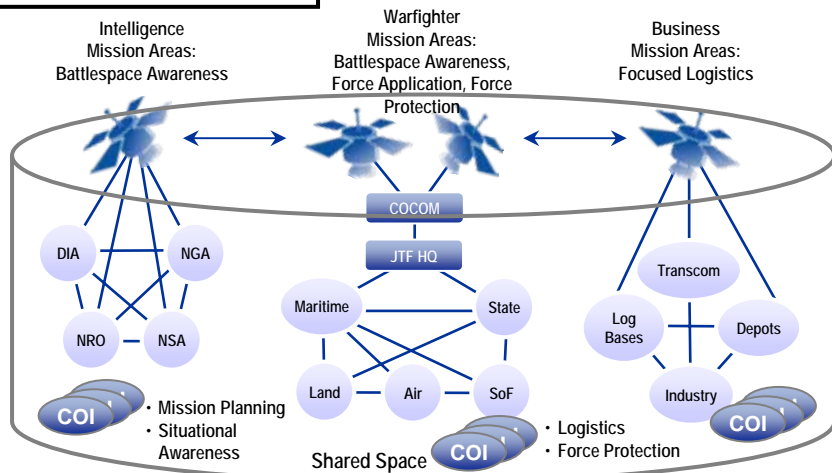
Would you like to see a map? >

Net-Centricity – Breaking Down Stovepipes

"As-Is" Environment

Intelligence Mission Areas: Battlespace Awareness

- DIA
- NGA
- NRO
- NSA
- Situational Awareness

Warfighter Mission Areas: Battlespace Awareness, Force Application, Force Protection

- COCOM
- JTF HQ
- Maritime
- State
- Land
- Air
- SoF
- Force Protection
- Mission Planning
- Command & Control

Business Mission Areas: Focused Logistics

- Transcom
- Log Bases
- Depots
- Industry
- Focused Logistics Data

Insufficient Synchronous Collaboration

"To-Be" Environment

Intelligence Mission Areas: Battlespace Awareness

- DIA
- NGA
- NRO
- NSA
- COI

Warfighter Mission Areas: Battlespace Awareness, Force Application, Force Protection

- COCOM
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- Air
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Business Mission Areas: Focused Logistics

- Transcom
- Log Bases
- Depots
- Industry
- COI

- Mission Planning
- Situational Awareness

Shared Space

- Logistics
- Force Protection

Pre-Net-Centricity OODA Loop

- Observe
- Orient
- Decide
- Act

Stove-piped information = Large OODA Loop

Net-Centric OODA Loop

- Observe
- Orient
- Decide
- Act

Shared, accessible information = Small OODA Loop

America's Army: The Strength of the Nation – Army Strong
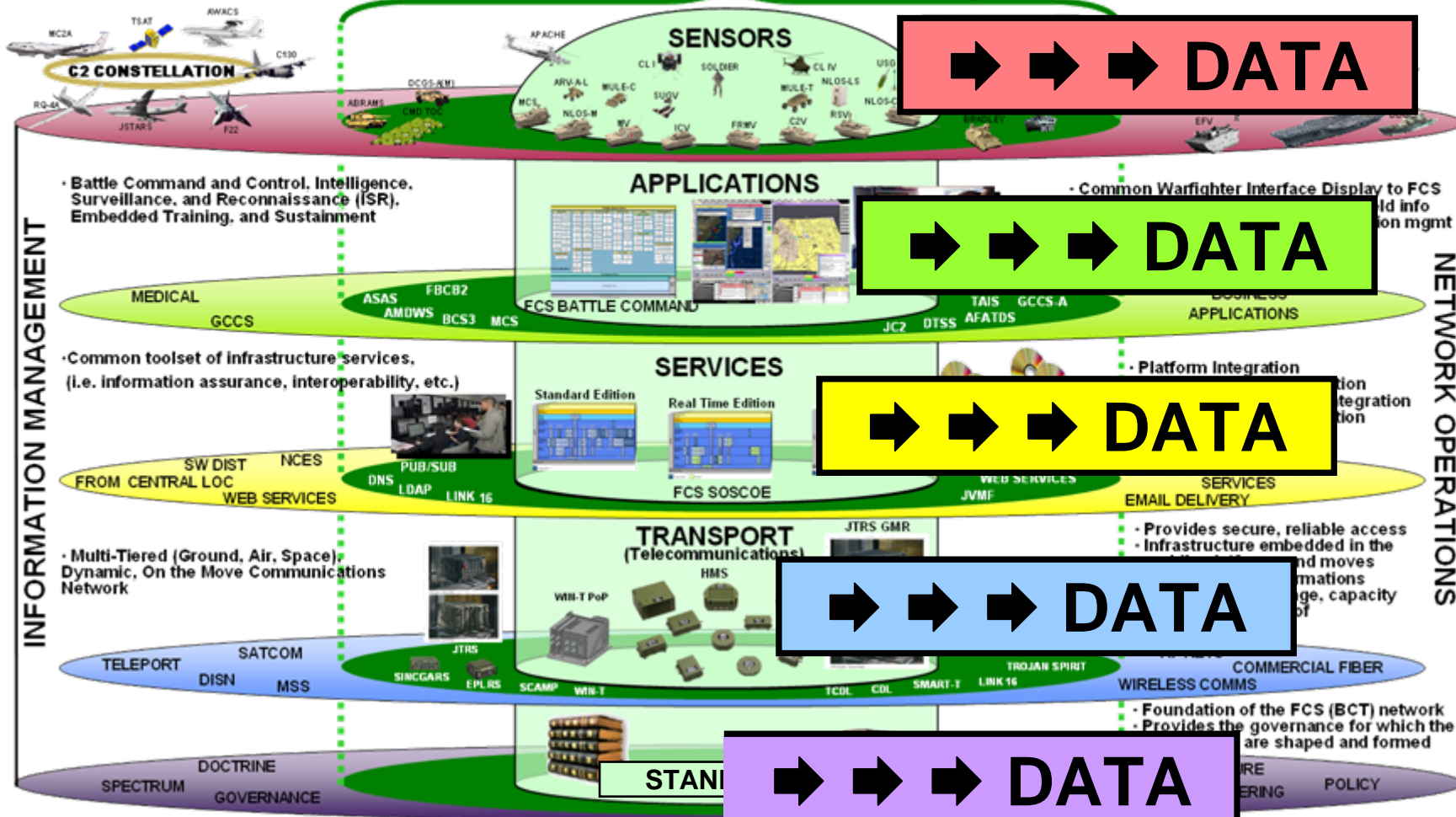
GLOBAL INFORMATION GRID

LANDWARNET

· Suite of ground/air, manned/unmanned platforms, with a diverse set of sensors tailored to the warfighters needs

SENSORS

➡ ➡ ➡ **DATA**

· Battle Command and Control, Intelligence, Surveillance, and Reconnaissance (ISR), Embedded Training, and Sustainment

APPLICATIONS

· Common Warfighter Interface Display to FCS
...ld info
...ion mgmt

➡ ➡ ➡ **DATA**

MEDICAL   ASAS   FBCB2   FCS BATTLE COMMAND   TAIS   GCCS-A
GCCS   AMDWS   BCS3   MCS   JC2   DTSS   AFATDS   BUSINESS APPLICATIONS

·Common toolset of infrastructure services, (i.e. information assurance, interoperability, etc.)

SERVICES

Standard Edition   Real Time Edition

· Platform Integration
...tion
...tegration
...tion

➡ ➡ ➡ **DATA**

SW DIST   NCES   PUB/SUB
FROM CENTRAL LOC   DNS   LDAP   LINK 16   FCS SOSCOE   WEB SERVICES   SERVICES
WEB SERVICES   JVMF   EMAIL DELIVERY

· Multi-Tiered (Ground, Air, Space), Dynamic, On the Move Communications Network

TRANSPORT
(Telecommunications)

JTRS GMR
HMS
WIN-T PoP

· Provides secure, reliable access
· Infrastructure embedded in the
...nd moves
...rmations
...ge, capacity
...of

➡ ➡ ➡ **DATA**

TELEPORT   SATCOM   JTRS
DISN   MSS   SINCGARS   EPLRS   SCAMP   WIN-T   TCDL   CDL   SMART-T   LINK 16   COMMERCIAL FIBER
TROJAN SPIRIT   WIRELESS COMMS

· Foundation of the FCS (BCT) network
· Provides the governance for which the
...are shaped and formed

STAN... ➡ ➡ ➡ **DATA**

DOCTRINE
SPECTRUM   GOVERNANCE

INFORMATION MANAGEMENT

NETWORK OPERATIONS

- **Five locations to provide complete & overlapping coverage of Combatant Command Areas of Responsibility (AOR)**
  - All connected to the Global Information Grid (GIG)
  - Focus on Intertheater vs. Reachback via Teleports
  - Support Army/USMC Units & Comm-on-the-Move

**Fixed Regional Hub Nodes (FRHN)**
5 Planned Locations World Wide

Landstuhl/Ramstein

North West

Lago Di Patria

Camp Roberts

Ft. Buckner

Wahiawa
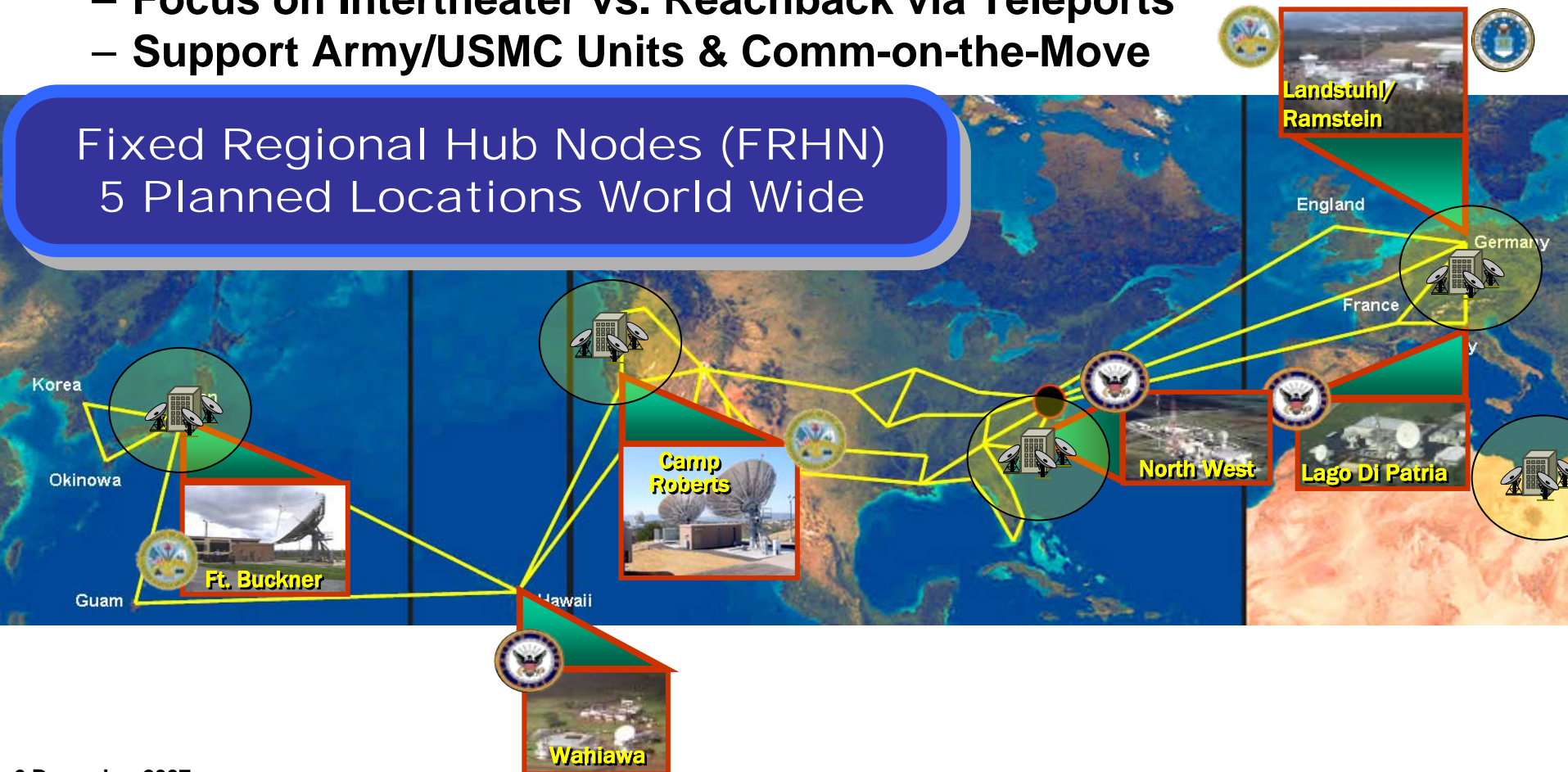
> **The purpose of the APC initiative is to improve delivery services through:**
>   – **Achieving Net-Centric Operations and Warfare Environment**
>   – **Improving IA and Security Posture**
>   – **Reducing Total Cost of Ownership (TCO) for Information Technology**

Legend:
- **APC – IOC**
- **APC – In Progress**
- **APC – Pre-decisional**
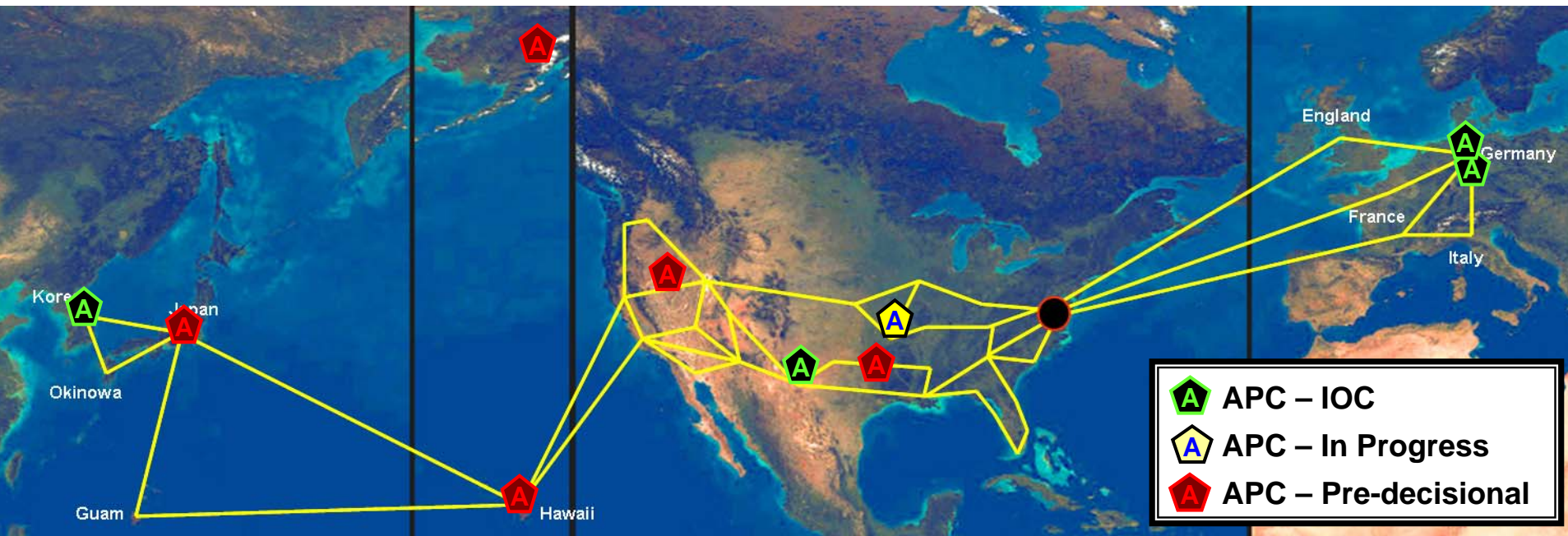
Network Service Center - Regional

Generating Force

Capabilities:
- I3MP
- NetOps
- KCs (AKO/DKO/…)
- Business Domain
- Intel Domain
- NCES
- APCs
- TNOSCs
- Net Svc Ctr – Tng (NSC-T)

⟺
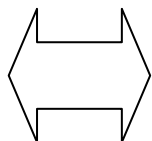
Network Service Center – Regional

(Virtual Combination of Global Capabilities with a regional expression)

- **Regional Hub Node (RHN)**
- **Area Processing Center (APC)**
- **AKO-F**
- **Theater Network Operations & Security Center (TNOSC)**

⟺
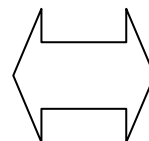
Operational Army

Capabilities:
- **WIN-T Increments (JNN-N)**
- **JTRS**
- **SATCOM**
- **NetOps**
- **Aerial Layer**
- **Transport for Trojan SPIRIT, CSS VSAT, SSET VSAT, BFT, PAONet, MedNet, etc.**
- **APCs**
- **RHNs**
- **NSC-Rs**

OPERATIONAL IT/DATA REQUIREMENTS:

NETWORK – constantly changing

E-MAIL ADDRESS – constantly changing/multiple

TELEPHONE NUMBER – constantly changing/multiple

COLLABORATION TOOLS – constantly changing

FILE STORAGE SYSTEM – constantly changing

Garrison

AKO ARMY KNOWLEDGE ONLINE

AKO-S

(NIPR/SIPR**)**

808-555-2020

BlackBerry

Chat

john.doe@schofield.army.mil

Deployed

AKO-S

AKO

DSN 318-965-6067 **(SIPR/**NIPR**)**

iridium

CPOF

macromedia BREEZE

Chat

CIDNE

john.doe@mnci-north.army.mil
2-25cdr@mnci-north.army.smil.mil

Training

AKO-S

AKO

(SIPR/NIPR**)**

308-965-6067

iridium

CPOF

Chat

john.doe@2-25.25idl.army.mil
2-25cdr@2-25.25idl.army.smil.mil

Power Projection

AKO ARMY KNOWLEDGE ONLINE

AKO-S

(NIPR/SIPR**)**

901-609-5050

901-786-1524

Chat

BlackBerry

john.doe@us.army.mil

Honolulu

A Soldier's Story

Ideal End-State

Universal E-Mail Address

Universal File Storage

One Telephone Number

Standard Collaboration Tool Set

SOLDIERS • FAMILIES • ARMY CIVILIANS
ARMY STRONG.
U.S.ARMY

Conclusions

Persistent Conflict
 …expeditionary environment for the future

Future Commercial Capabilities
 …breaking down the stovepipes
 …make data visible, accessible & understandable

Army Initiatives
 …FRHN, APC, AKO-F & TNOSC
 …Network Service Center-Regional

Joint-Shared Situational Awareness
…*Bottom Line* to Warfighter

Great Speaking "Team"

COL(P) Brian Donahue, USA

Director, LandWarNet Directorate

HQDA, G-3/5/7

Mr. David Ludwig, USA

Deputy, Program Executive Officer

Command, Control Communications

(Tactical)

Mr. Gary Winkler, USA

Director, Program Executive Officer

Enterprise Information Systems

LTG(Ret) Peter Cuviello

Senior Strategist, Network Enabled

Operational Support, Bearing Point

Ms. Sheila Andahazy

Vice President, Defense Group,

Computer Science Corporation

QUESTIONS & THOUGHTS

LTG Jeff Sorenson
Chief Information Officer/G-6

AMERICA'S ARMY: THE STRENGTH OF THE NATION
ARMY STRONG

U.S.ARMY